

Notice of Allowability

Application No.

10/780,337

Examiner

Dirk Wright

Applicant(s)

COLVIN ET AL.

Art Unit

3681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to _____.
2. ☒ The allowed claim(s) is/are 1-23.
3. ☒ The drawings filed on 17 January 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying Indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>02172004</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

HC

Claim Amended

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Frank McKenzie on Monday, May 09, 2005.

The application has been amended as follows:

In claim 18, line 15, "the" (first occurrence) was changed to "a pressure".

Claims Allowed

Claims 1-23 are allowable over the prior art of record. The prior art does not anticipate nor render obvious the claim combination: A method for controlling a vehicle powertrain including a transmission having an input speed, an internal combustion engine having an output and a throttle position, and an input clutch having a variable torque capacity for driveably connecting the input and output, the method comprising the steps of: determining a current input speed; determining a value representing requested powertrain output; producing an indication that a vehicle launch condition has been initiated; determining a target input speed based on the value representing requested powertrain output; determining a variable pressure for actuating the input clutch during the launch condition based on a difference between the current input speed and the target input speed; and using the variable pressure to control the torque capacity of the input clutch during the launch condition; or a method for controlling a vehicle powertrain including a transmission having an input speed, an internal combustion engine having an output

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and a throttle position, and an input clutch having a variable torque capacity for driveably connecting the input and output, the method comprising the steps of: determining a current input speed; determining a value representing requested powertrain output; producing an indication that a vehicle launch condition has been initiated, determining a target input speed based on the value representing requested powertrain output; determining a variable pressure for actuating the input clutch during the launch condition based on a difference between the current input speed and the target input speed; using the variable pressure to control the torque capacity of the input clutch during the launch condition, determining the current gear in which the transmission is operating; determining a target motor output torque based on the current gear and throttle position; and using the target motor output torque to control the torque produced by the motor; or a method for controlling a vehicle powertrain including a transmission having an input speed, an electric motor producing torque that drives the input, an internal combustion engine having an output and throttle position, an input clutch having a variable torque capacity for driveably connecting the input and output, and an electronic controller communicating with the transmission and motor, the method comprising the steps of: repetitively determining the current input speed; repetitively determining the engine throttle position; generating a signal that a vehicle launch condition has been initiated; repetitively determining a target input speed based on the engine throttle position; repetitively determining a variable pressure for actuating the input clutch during the launch condition based on a difference between the current input speed and the target input speed; and generating a command to change the at the input clutch based on the determined variable pressure, whereby torque capacity of the input clutch changes during the launch condition.

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No particular single feature of the claim renders the claim as a whole patentable. Only the claim taken as a whole combination is deemed new and unobvious.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Prior Art Discussed

The examiner has considered the reference cited by applicant in his Information Disclosure Statement filed concurrently with the application. Brown '808 shows a clutch control for a hybrid vehicle launch in figure 14 but the method is different than the one claimed by applicant.

The references cited by the examiner are deemed pertinent to applicant's disclosure. Wheeler '999 shows a clutch control for vehicle launch in figure 3, but the method is different. Likewise, Tateno '246 shows a clutch control for vehicle launch in figures 16A and 16B, but the method is different.

Conclusion

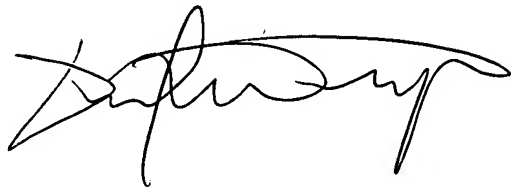
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dirk Wright whose telephone number is 571-272-7098. The examiner can normally be reached on Monday through Friday, 8AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dirk Wright
Primary Examiner
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A handwritten signature in black ink, appearing to read 'Dirk Wright', with a stylized, flowing script.

DW
Monday, May 09, 2005